Complete Summary

TITLE

Acute myocardial infarction (AMI): percentage of enrolled members 35 years of age and older with a diagnosis of AMI who received persistent beta-blocker treatment for six months after being discharged alive from the hospital.

SOURCE(S)

National Committee for Quality Assurance (NCQA). HEDIS 2006. Health plan employer data & information set. Vol. 2, Technical specifications. Washington (DC): National Committee for Quality Assurance (NCQA); 2005. 350 p.

Measure Domain

PRIMARY MEASURE DOMAIN

Process

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the Measure Validity page.

SECONDARY MEASURE DOMAIN

Does not apply to this measure

Brief Abstract

DESCRIPTION

This measure is used to assess the percentage of enrolled members 35 years of age and older during the measurement year who were hospitalized and discharged alive from July 1 of the year prior to the measurement year to June 30 of the measurement year with a diagnosis of acute myocardial infarction (AMI) and who received persistent beta-blocker treatment for six months after discharge.

RATIONALE

This measure examines one way of preventing a second heart attack. It measures the number of adults 35 years of age and older who were discharged from the hospital after surviving a heart attack and who received a prescription

for a type of drug called a "beta-blocker." Members who have a valid medical reason not to take the drug are excluded.

PRIMARY CLINICAL COMPONENT

Acute myocardial infarction (AMI); beta-blockers

DENOMINATOR DESCRIPTION

Health plan members age 35 years and older as of December 31 of the measurement year who were discharged alive from an acute inpatient setting with an acute myocardial infarction (AMI) between July 1 of the year prior to the measurement year through June 30 of the measurement year (see the "Description of Case Finding" and "Denominator Inclusions/Exclusions" fields in the Complete Summary)

NUMERATOR DESCRIPTION

A 180-day course of treatment with beta-blockers

Identify all members in the denominator population whose days supply dispensed is greater than or equal to 135 days in the 180 days following discharge. Persistence of treatment for this measure is defined as at least 75 percent of the days supply filled.

Refer to the original measure documentation for additional details.

Evidence Supporting the Measure

EVIDENCE SUPPORTING THE CRITERION OF QUALITY

- A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence
- A formal consensus procedure involving experts in relevant clinical, methodological, and organizational sciences
- One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

Evidence Supporting Need for the Measure

NEED FOR THE MEASURE

Overall poor quality for the performance measured
Use of this measure to improve performance
Variation in quality for the performance measured

EVIDENCE SUPPORTING NEED FOR THE MEASURE

National Committee for Quality Assurance (NCQA). The state of health care quality 2005: industry trends and analysis. Washington (DC): National Committee for Quality Assurance (NCQA); 2005.

State of Use of the Measure

STATE OF USE

Current routine use

CURRENT USE

Accreditation
Decision-making by businesses about health-plan purchasing
Decision-making by consumers about health plan/provider choice
External oversight/Medicaid
External oversight/Medicare
External oversight/State government program
Internal quality improvement

Application of Measure in its Current Use

CARE SETTING

Managed Care Plans

PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Physicians

LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Single Health Care Delivery Organizations

TARGET POPULATION AGE

Age 35 years and older

TARGET POPULATION GENDER

Either male or female

STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

Characteristics of the Primary Clinical Component

INCIDENCE/PREVALENCE

Approximately 1.1 million - 650,000 first and 450,000 recurrent - heart attacks occur each year in the United States, with about 450,000 resulting in death. It is estimated that 7.2 million Americans 20 years of age and older have a history of myocardial infarction (4.4 million men and 2.8 million women). There is evidence suggesting that around 2,900 to 5,000 lives are lost in the United States in the first year following acute myocardial infarction due to under-prescription of beta-blockers. Based upon results of large-scale clinical trials, beta-blockers have consistently been shown to reduce subsequent coronary events, cardiovascular mortality and all-cause mortality by 20 to 30 percent after an acute myocardial infarction (AMI) when taken indefinitely.

EVIDENCE FOR INCIDENCE/PREVALENCE

American Heart Association (AHA). 2000 heart and stroke statistical update. Dallas (TX): American Heart Association (AHA); 1999. 29 p.

Krumholz HM, Radford MJ, Wang Y, Chen J, Heiat A, Marciniak TA. National use and effectiveness of beta-blockers for the treatment of elderly patients after acute myocardial infarction: National Cooperative Cardiovascular Project. JAMA1998 Aug 19;280(7):623-9. PubMed

Morbidity & mortality: 2000 chart book on cardiovascular, lung, and blood diseases. Bethesda (MD): National Heart, Lung, and Blood Institute (NHLBI), National Institutes of Health (NIH); 2000 May.

Pashos CL, Normand SL, Garfinkle JB, Newhouse JP, Epstein AM, McNeil BJ. Trends in the use of drug therapies in patients with acute myocardial infarction: 1988 to 1992. J Am Coll Cardiol1994 Apr;23(5):1023-30. PubMed

Phillips KA, Shlipak MG, Coxson P, Heidenreich PA, Hunink MG, Goldman PA, Williams LW, Weinstein MC, Goldman L. Health and economic benefits of increased beta-blocker use following myocardial infarction. JAMA2000 Dec 6;284(21):2748-54. PubMed

Ryan TJ, Antman EM, Brooks NH, Califf RM, Hillis LD, Hiratzka LF, Rapaport E, Riegel B, Russell RO, Smith EE III, Weaver WD. 1999 update: ACC/AHA guidelines for the management of patients with acute myocardial infarction. A report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines. J Am Coll Cardiol1999 Sep;34(3):890-911. [849 references] PubMed

Yusuf S, Wittes J, Friedman L. Overview of results of randomized clinical trials in heart disease. I. Treatments following myocardial infarction. JAMA1988 Oct 14;260(14):2088-93. PubMed

ASSOCIATION WITH VULNERABLE POPULATIONS

Unspecified

BURDEN OF ILLNESS

See "Incidence/Prevalence" field.

UTILIZATION

Unspecified

COSTS

The American Heart Association estimates the total annual cost of medical care and lost productivity due to heart disease is $12 billion to $24 billion.

EVIDENCE FOR COSTS

National Committee for Quality Assurance (NCQA). HEDIS 2006: narrative: what's in it and why it matters. Vol. 1. Washington (DC): National Committee for Quality Assurance (NCQA); 2005. 88 p.

Institute of Medicine National Healthcare Quality Report Categories

IOM CARE NEED

Getting Better

IOM DOMAIN

Effectiveness

Data Collection for the Measure

CASE FINDING

Users of care only

DESCRIPTION OF CASE FINDING

Health plan members age 35 years and older as of December 31 of the measurement year who were continuously enrolled on the discharge date* through 180 days after discharge and who have had no more than one gap in enrollment of up to 45 days (commercial, Medicare) within the 180 days of the event or not more than a one-month gap in coverage (Medicaid)

*Event/diagnosis - Discharged alive from an acute inpatient setting with an acute myocardial infarction (AMI) between July 1 of the year prior to the measurement year through June 30 of the measurement year (see the "Denominator Inclusions/Exclusions" field).

DENOMINATOR SAMPLING FRAME

Patients associated with provider

DENOMINATOR INCLUSIONS/EXCLUSIONS

Inclusions

Health plan members age 35 years and older as of December 31 of the measurement year who were discharged alive from an acute inpatient setting with an acute myocardial infarction (AMI) between July 1 of the year prior to the measurement year through June 30 of the measurement year. If a member has more than one episode of AMI from July 1 of the year prior to the measurement year through June 30 of the measurement year, the managed care organization (MCO) should only include the first discharge and must use the codes listed in Table PBH-A in the original measure documentation to identify AMIs.

Transfer to acute facilities. The MCO should include hospitalizations in which the member was transferred directly to another acute care facility for any diagnosis. Count the discharge from the subsequent, not the initial, acute inpatient facility. The discharge date from the facility to which the member was transferred must occur on or before June 30 of the measurement year.

Readmissions. If the member was readmitted to an acute or non-acute care facility for any diagnosis, the MCO should include the member in the denominator and use the discharge date from the original hospitalization.

Exclusions

- The MCO is strongly encouraged to exclude from the denominator members who are identified as having a contraindication to beta-blocker therapy or previous adverse reaction (i.e., intolerance) to beta-blocker therapy. The MCO should look as far back as possible in the member's history through the end of the continuous enrollment period, in administrative data for evidence of a contraindication to beta-blocker therapy. Refer to Table PBH-C in the original measure documentation for codes to identify contraindications to beta-blocker therapy.
- Transfers to non-acute facilities. The MCO should exclude from the denominator hospitalizations in which the member was transferred directly to a non-acute care facility for any diagnosis.

RELATIONSHIP OF DENOMINATOR TO NUMERATOR

All cases in the denominator are equally eligible to appear in the numerator

DENOMINATOR (INDEX) EVENT

Clinical Condition
Institutionalization
Patient Characteristic

DENOMINATOR TIME WINDOW

Time window brackets index event

NUMERATOR INCLUSIONS/EXCLUSIONS

Inclusions
A 180-day course of treatment with beta-blockers

Identify all health plan members in the denominator whose days supply dispensed is greater than or equal to 135 days in the 180 days following discharge. Persistence of treatment for this measure is defined as at least 75 percent of the days supply filled.

Refer to the original measure documentation for additional details.

Exclusions
Unspecified

MEASURE RESULTS UNDER CONTROL OF HEALTH CARE PROFESSIONALS, ORGANIZATIONS AND/OR POLICYMAKERS

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

NUMERATOR TIME WINDOW

Fixed time period

DATA SOURCE

Administrative data

LEVEL OF DETERMINATION OF QUALITY

Individual Case

PRE-EXISTING INSTRUMENT USED

Unspecified

Computation of the Measure

SCORING

Rate

INTERPRETATION OF SCORE

Better quality is associated with a higher score

ALLOWANCE FOR PATIENT FACTORS

Analysis by subgroup (stratification on patient factors, geographic factors, etc.)

DESCRIPTION OF ALLOWANCE FOR PATIENT FACTORS

This measure requires that separate rates be reported for Medicaid, Medicare, and commercial product lines.

STANDARD OF COMPARISON

External comparison at a point in time
External comparison of time trends
Internal time comparison

Evaluation of Measure Properties

EXTENT OF MEASURE TESTING

Unspecified

Identifying Information

ORIGINAL TITLE

Persistence of beta-blocker treatment after a heart attack (PBH).

MEASURE COLLECTION

HEDIS® 2006: Health Plan Employer Data and Information Set

MEASURE SET NAME

Effectiveness of Care

DEVELOPER

National Committee for Quality Assurance

INCLUDED IN

Ambulatory Care Quality Alliance

ADAPTATION

Measure was not adapted from another source.

RELEASE DATE

2004 Jan

REVISION DATE

2005 Jan

MEASURE STATUS

This is the current release of the measure.

SOURCE(S)

National Committee for Quality Assurance (NCQA). HEDIS 2006. Health plan employer data & information set. Vol. 2, Technical specifications. Washington (DC): National Committee for Quality Assurance (NCQA); 2005. 350 p.

MEASURE AVAILABILITY

The individual measure, "Persistence of Beta-blocker Treatment After a Heart Attack (PBH)," is published in "HEDIS 2006. Health plan employer data & information set. Vol. 2, Technical Specifications."

For more information, contact the National Committee for Quality Assurance (NCQA) at 2000 L Street, N.W., Suite 500, Washington, DC 20036; Telephone: 202-955-3500; Fax: 202-955-3599; Web site: www.ncqa.org.

COMPANION DOCUMENTS

The following is available:

- National Committee for Quality Assurance (NCQA). The state of health care quality 2005: industry trends and analysis. Washington (DC): National Committee for Quality Assurance (NCQA); 2005. 74 p.

For more information, contact the National Committee for Quality Assurance (NCQA) at 2000 L Street, N.W., Suite 500, Washington, DC 20036; Telephone: 202-955-3500; Fax: 202-955-3599; Web site: www.ncqa.org.

NQMC STATUS

This NQMC summary was completed by ECRI on June 16, 2006. The information was not verified by the measure developer.

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